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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,669	05/31/2006	Konstntin Lindenthal	101914107	6344

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EXAMINER

NGUYEN, TUYEN T

ART UNIT	PAPER NUMBER
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2832

MAIL DATE	DELIVERY MODE
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06/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,669	Applicant(s) LINDENTHAL ET AL.	
	Examiner TUYEN T. NGUYEN	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/6/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no antecedent basis for “the primary winding.”

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10-11, 13-14 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanazawa et al. [US 6,457,229 B1].

Kanazawa et al. discloses an ignition coil [figure 2] comprising:

- a rod core [3];
- a first bobbin [2A] having a first coil [2];
- a second bobbin having a second coil [1] , wherein the second bobbin is formed by an assembly including the first bobbin, the first coil and a potting compound [resin 12] for the first coil;
- a flux return [10] surrounding the first coil.

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Regarding claim 11, Kanazawa et al. inherently discloses contacts for the first coil being embedded in the resin.

Regarding claim 13, Kanazawa et al. discloses the assembly being fixed with an elastomer [19].

Regarding claim 14, Kanazawa et al., in other embodiment [figure 3], discloses the rod core being fixed using an elastomer [20].

Regarding claim 17, Kanazawa et al. discloses the first coil [or second coil] is at least partially embedded in the elastomer [19].

Regarding claim 18, Kanazawa et al. inherently discloses the elastomer [19] forms a mechanical fixing for the flux return member [10].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa et al. in view of Skinner et al. [US 6,556,116 B2].

Kanazawa et al. discloses the instant claimed invention except for an air gap.

Skinner et al. discloses an air gap [22] between the coil assembly and an outer flux return shell [20].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include an air gap between the coil assembly and the outer flux return

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shell of Kanazawa et al., as suggested by Skinner et al., for the purpose of improving expand/contract.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa et al. in view of Koelter [US 6,286,490 B1].

Kanazawa et al. discloses the instant claimed invention except for the elastomer being formed as a protective jacket.

Koelter discloses an elastomer body [figure 3] for an ignition coil.

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use elastomer for the protective jacket [body/casing] of Kanazawa et al., as suggested by Koelter, for the purpose of improving vibration.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa et al. in view of Sakamaki et al. [US 5,870,012]].

Regarding claim 16, Kanazawa et al. discloses the instant claimed invention except for the elastomer forms one of a retaining ring and a protective ring.

Sakamaki et al. discloses an ignition coil assembly [figure 1] being fixed with an elastomer retaining ring [24].

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to fix the ignition coil assembly of Kanazawa et al. with the elastomer retaining ring, as suggested by Sakamaki, for the purpose of reducing vibration.

Conclusion

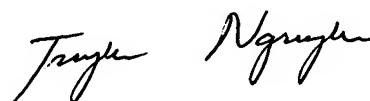
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T. NGUYEN whose telephone number is 571-272-1996. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN *TN*



TUYEN T. NGUYEN
Primary Examiner
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